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**United States Patent** [19][11] **Patent Number:** **5,179,654****Richards et al.**[45] **Date of Patent:** \* **Jan. 12, 1993**[54] **HELP PROVISION IN A DATA PROCESSING SYSTEM**[75] **Inventors:** Justin J. C. Richards, Warwick;  
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both of England[73] **Assignee:** International Business Machines  
Corporation, Armonk, N.Y.[\*] **Notice:** The portion of the term of this patent  
subsequent to Jun. 16, 2009 has been  
disclaimed.[21] **Appl. No.:** 790,840[22] **Filed:** Nov. 12, 1991**Related U.S. Application Data**[63] Continuation of Ser. No. 469,549, Mar. 20, 1990, Pat.  
No. 5,122,972.[51] **Int. Cl.<sup>5</sup>** ..... G06F 15/20[52] **U.S. Cl.** ..... 395/157; 395/161[58] **Field of Search** ..... 395/155-158,  
395/160, 161, 144-149[56] **References Cited****U.S. PATENT DOCUMENTS**

4,555,775	11/1985	Pike	364/900
4,648,062	3/1987	Johnson et al.	364/900
4,752,889	6/1988	Rappaport et al.	364/513
4,789,962	12/1988	Berry et al.	364/900
4,821,211	4/1989	Torres	364/521
4,832,283	4/1989	Diehm et al.	364/518

4,899,276	2/1990	Stadler	364/300
4,970,678	11/1990	Sladowski et al.	364/900

**FOREIGN PATENT DOCUMENTS**

0056886	8/1982	European Pat. Off.	.
0171663	2/1986	European Pat. Off.	.
0249293	12/1987	European Pat. Off.	.
0273248	7/1988	European Pat. Off.	.

**OTHER PUBLICATIONS**"Flat Hierarchical Menu," International Technology  
Disclosures, vol. 5, No. 1, Jan. 25, 1987.*Primary Examiner*—Heather R. Herndon  
*Attorney, Agent, or Firm*—Mark E. McBurney[57] **ABSTRACT**

Help is provided to the user of a data processing system having a work station, including a display, and input means including a visible on-screen indicator and a selection means, in response to a request from the user, information on the current state of the system is used to address a store of hierarchical help text information, thereby providing contextual help text which is displayed in a separate window on the display screen alongside information related to the task in hand. A help map function is available which displays concurrently, separately from the help text, a portion of a hierarchical map of the stored help text to be replaced by new help text corresponding to the selected map entry.

**21 Claims, 7 Drawing Sheets**